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DEVICE FOR POSITIONING A PICTURE HOOK ON A WALL

TECHNICAL FIELD OF THE INVENTION

This invention relates to a device for positioning a hanger such as a picture hook on a wall for hanging pictures, maps, mirrors and similar articles.

BACKGROUND

When hanging a picture, for example, on a wall, the precise location of the hook from which the picture will be suspended is difficult to determine since the location is masked by the picture itself. One method of determining a suitable location for the hook involves measuring the picture and judging where the hook should be positioned taking into account factors such as the length and elasticity of the cord by which the picture is to hang. However, such a method is time consuming and inaccuracies in calculation of the position are easily introduced.

WO-A-8000785 describes a method and apparatus for positioning hanging devices on a wall whereby a strip is detachably adhered to the article to be hung on the wall. Once the article has been positioned satisfactorily, the strip is then also detachably adhered to the wall. Thereafter, the article is detached from the strip so that the strip remains on

the wall and a suitable position for the hook or other hanger may then be determined from the strip and marked on the wall. However, the method and apparatus described in that document would not be effective if the article to be hung was substantial in size or weight due to the fact that the adhesive used on the strip provides only partial bonding. Also, such a device may only reasonably be used once due to the loss of adhesion which would occur in repeated use. In addition, when actually positioning the article, the person holding the article may easily obscure another's view of the article and so make it difficult to determine a suitable position.

The present invention seeks to provide an improved device for positioning a hanger on a wall which is both simple and effective to use and which overcomes the above-identified problems.

SUMMARY OF THE INVENTION

The present invention proposes a device for positioning a hanger on a wall, comprising a substantially planar support member provided with holding means for engagement with the hanger, and an elongate handle connected to the support member, the arrangement being such that, in use, the handle can project beyond the boundary of an article suspended from the hanger so that the device can be held thereby with the support member adjacent and parallel to a wall in order to position the hanger and the article suspended therefrom relative to the wall.

The invention further provides a method of positioning a hanger on a wall comprising the steps of: attaching a hanger to a support member having a projecting handle; suspending an article from the hanger so that the handle projects beyond a boundary of the article; determining a suitable position for the article on a wall by movement of the handle and thereby the support member, the hanger and the article; removing the article from the hanger whilst holding the handle in a fixed position relative to the wall; and determining the position on the wall of the hanger.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention is exemplified in the accompanying drawings, in which:

Figure 1 is an elevational view of a first embodiment of the invention,

Figure 2 is an enlarged view of part of the support means of Fig. 1,

Figure 3 is an elevational view of a second embodiment of the invention,

Figure 4 is an enlarged side view of part of the support means of Fig. 3 as viewed from the left,

Figures 5a and 5b are elevational views of a third embodiment of the invention,

Figures 6a and 6b are elevational views of a fourth embodiment of the invention,

Figures 7 and 8 are elevational views of fifth and sixth embodiments of the invention respectively, and

Figure 9 is a plan view of the embodiment of Fig. 8.

DETAILED DESCRIPTION OF THE DRAWINGS

With reference to Fig. 1, the illustrated device for positioning a picture hook on a wall includes a substantially planar support member 2 and an elongate handle 3. The support member 2 is in the form of a triangular frame and includes holding means in the form of an elongate upper frame member 4 disposed transversely of the handle 3, and two side frame members 5 which join the upper frame member 4 to one end of the handle 3. The handle 3 is of cranked shape and, at its free end, includes a grip portion 3a which projects out of the plane of the frame so that the grip portion can be gripped in the hand to allow the frame 2 to be held adjacent and parallel to a wall. The handle 3 is of sufficient length to project beyond the boundary of a planar article, e.g. a picture, which is to be hung. In addition, the body of the user need not obscure another's view of the article as it is being positioned with the device. One of the side frame members 5 is permanently secured to the adjacent end of the upper frame member 4, but the other side frame member 5 has an eye 6 through which an end 7 of the

upper frame member 4 passes. The end 7 is kinked to form a detent which engages the eye 6 to avoid inadvertent detachment of the respective frame members, but the frame 2 is sufficiently resilient to allow insertion and disengagement of the detent 7 from the eye 6.

In Fig. 1, a picture hook 8 of known form is attached to the upper frame member 4 by insertion of the upper frame member through a loop (not shown) on the picture hook. Stop means in the form of flanges or projections (not shown) may be provided on the upper frame member 4 to engage the picture hook 8 and so hold it in position on the upper frame member. These flanges or projections may be fixed, in which case they must be sufficiently small or resilient to allow the loop of the picture hook 8 to pass over them when the picture hook is being attached to or removed from the frame 2. Alternatively, the flanges or projections may be movable on the upper frame member 4, in which case they may be frictionally engaged with the upper frame member or means for holding the flanges or projections either side of the picture hook 8 may be provided in the form of clips or pegs and holes in the upper frame member.

A picture 9 is shown hanging from the picture hook 8 in Fig. 1. The picture 9 is hung from a cord 10 which is secured at each end to the frame 11 of the picture.

In use, the frame 2 is opened to allow the picture hook 8 to be attached to the upper frame member 4, and the picture hook is threaded onto the upper frame member with the upper frame member passing through the loop of the picture hook. The frame 2 is then closed and the

picture 9 is hung by the cord 10 on the hook 8. Whilst holding the grip portion 3a of the handle 3 the user may move the picture against the wall to determine a suitable location for hanging the picture. Once a suitable location has been determined the picture 9 is removed from the hook 8 whilst holding the triangular frame 2 steady by means of the handle 3. The picture hook 8 is then affixed to the wall by any suitable means. The picture hook can either be attached directly to the wall whilst it is still being held by the frame 2, or the position of the picture hook can be marked on the wall whilst it is held by the frame using a pencil or other suitable means. The picture hook 8 is then removed from the frame 2 and fixed to the wall in the position marked. The picture 9 can then be hung from the picture hook.

It will be appreciated that the support member 2 need not necessarily be triangular but may be of any shape which is sufficiently rigid to support even large or heavy articles such as mirrors which may be hung in similar manner using the device. In addition, more than one picture hook may be held by the upper frame member 4, depending upon the number of picture hooks required to hang the article. In this case a greater number of flanges or projections would be provided on the upper frame member 4. Picture hooks and other hangers of various shapes and sizes may also be easily attached to the support member. It will be appreciated that the device can be used with the grip portion 3a located above or below the article being hung. The handle 3 may be telescopic, or alternatively, the handle may be detachable from the frame 2 so that a variety of handles of different lengths may be used.

Fig. 3 shows an alternative form of support member 12. This support member 12 is in the form of a U-shaped frame secured to a depending handle 3 of the kind described above. A resilient cross bar 13 is securely attached at one end (the right hand end as shown) to one of the upright arms of the support member 12, and at its other end engages a groove 14 (see detail of Fig. 4) provided in the top edge of the other upright arm of the support member.

It will be appreciated that a picture hook or other hanger can be attached to the cross bar 13 in a similar manner to that described above, and that flanges or projections to hold the picture hook may similarly be provided. The device is used to position an article on a wall, as previously described.

With reference to Figs 5a and 5b, the support member 2 of Fig. 1 is shown with an alternative means of opening and closing. In this case the upper frame member is divided to form two aligned inwardly directed fingers 4a and 4b, and has spaced projections 15 located either side of the division. The frame 2 is sufficiently resilient that the two parts 4a and 4b of the upper frame member 4 can be pulled away from one another so as to allow the introduction of a picture hook 8 or similar hanger into the gap. The picture hook is then held in position by the ends of the fingers which engage in the loop of the picture hook. The projections 15 prevent the picture hook 8 from moving away from its central position. Otherwise, the device is used in a similar manner to that described in relation to Fig. 1.

Fig.s 6a and 6b show a further modification to the frame shown in Fig.s 5a and 5b. A loop 16 surrounds the two side frame members of the frame 2 to ensure that the fingers 4a and 4b do not inadvertently disengage from the picture hook 8. When the picture hook 8 is mounted on the fingers the loop 16 is moved relative to the two side members 5 until the loop draws the two members inwardly. The engagement of the loop 16 with the side frame members 5 may be assisted by the provision of a serrated surface (not shown) on at least one of the side frame members.

An alternative form of device for positioning a picture hook is shown in Fig. 7. The device comprises a substantially planar support plate 22 which is extended to form an elongate handle 23. A part of the handle 23 (not shown) projects out of the plane of the support plate 22 so that the support plate may be held adjacent and parallel to a wall. The support plate 22 includes any suitable form of holding means (not shown) for releasably engaging a picture hook 8 or the like, and includes an aperture 27 which coincides with an end of the picture hook 8. The device is used as described in relation to Fig. 1.

In Fig.s 8 and 9 a further form of device for positioning a picture on a wall is shown. The device has an elongate substantially planar support member 32 which has holding means 38 at one end and is extended to form a handle 33 at the other end. The holding means 38 is in the form of a laterally projecting pin to which a known form of picture hook or other hanger can be attached, a number of such pins of different sizes being provided for use with different sizes or

numbers of picture hooks. Each pin can again be provided with flanges or projections for retaining the picture hooks thereon. The handle 3 includes a grip 33b which projects perpendicularly from the plane of the handle 33. Alternatively the handle 33 may be of the cranked form described above. The device is used as already described.

In each of the embodiments the handle may be telescopic or detachable from the support member so that handles of different lengths may be used. The picture hook could also be permanently attached to the support member so that once its position on the wall has been determined and marked a similar picture hook is actually secured to the wall.

* * * * *

CLAIMS

1. A device for positioning a hanger on a wall, comprising a substantially planar support member (2; 12; 22; 32) provided with holding means (4; 13; 38) for engagement with the hanger, and an elongate handle (3; 23; 33) connected to the support member, the arrangement being such that, in use, the handle can project beyond the boundary of an article suspended from the hanger so that the device can be held thereby with the support member adjacent and parallel to a wall in order to position the hanger and the article suspended therefrom relative to the wall.
2. A device according to Claim 1, in which the holding means comprises an elongate member (4; 13; 38) onto which a hanger having a loop may be threaded, a first end of the elongate member being connected to the support member and a second end of the elongate member being free.
3. A device according to Claim 2, in which the second end of the elongate member (4; 13) is detachably engageable with a respective portion (6; 14) of the support member.
4. A device according to Claim 3, in which the support member is provided with an eye (6) and the support member is sufficiently resilient to allow the second end of the elongate member (4) to be inserted into and removed from the eye.

5. A device according to Claim 3, in which the support member is provided with a groove (14) for engagement with the second end of the elongate member (4).

6. A device according to Claim 2, in which the holding means comprises a pair of opposed inwardly directed elongate members (4a, 4b) having free ends onto which a hanger having a loop may be threaded, first ends of both elongate members being connected to respective portions of the support member, and the support member being sufficiently resilient to allow lateral displacement of the two members (4a, 4b) relative to one another so as to allow introduction of the hanger between the free ends of the two members.

7. A device according to Claim 6, including means (16) for holding the two elongate members in engagement with the hanger.

8. A device according to Claim 1, in which the holding means is provided with stop means (15) for retaining the hanger in position relative thereto.

9. A device according to Claim 1, in which the handle includes a grip portion (3b; 33b) which projects out of the plane of the support member (2; 32).

10. A device according to Claim 1, in which the handle (3) is detachable from the support member and different handles of differing lengths are engageable with the support member.

11. A device according to Claim 1, in which the

handle (3) is telescopic.

12. A method of positioning a hanger on a wall comprising the steps of: attaching a hanger (8) to a support member (2; 12; 22; 32) having a projecting handle (3; 23; 33) ; suspending an article (9) from the hanger so that the handle projects beyond a boundary of the article; determining a suitable position for the article on a wall by movement of the handle and thereby the support member, the hanger and the article; removing the article from the hanger whilst holding the handle in a fixed position relative to the wall; and determining the position on the wall of the hanger.

* * * * *

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FIG 1

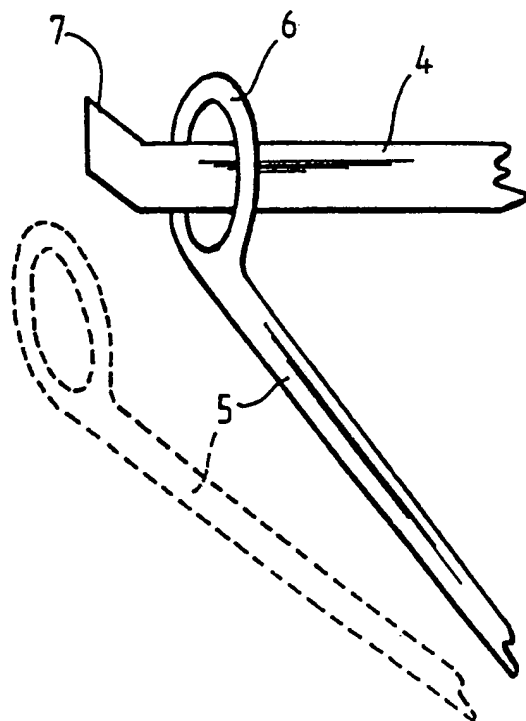
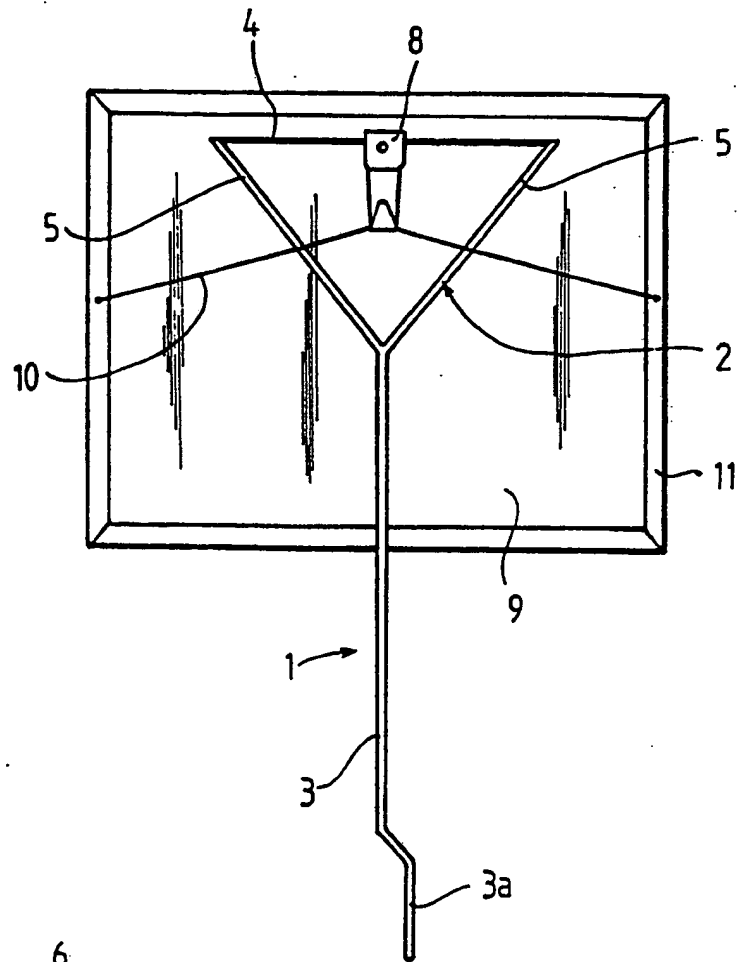
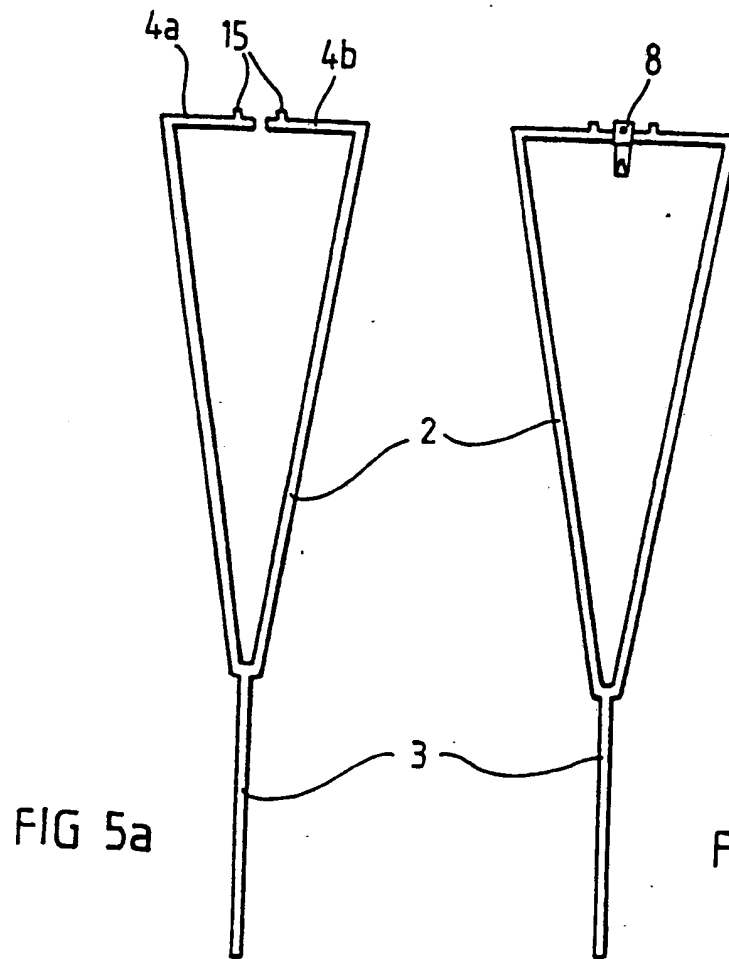
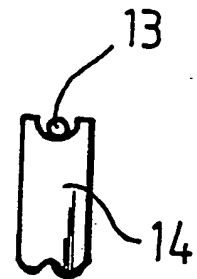
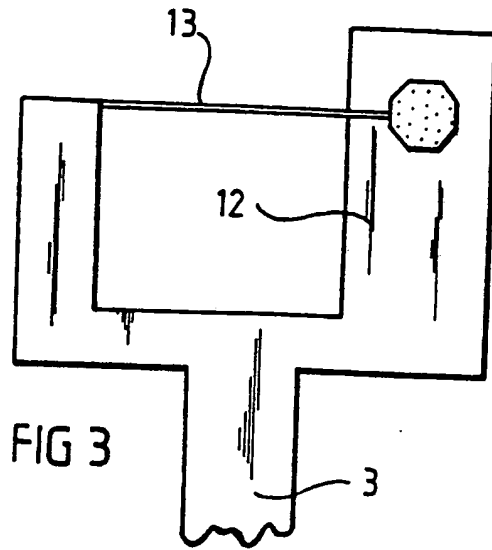
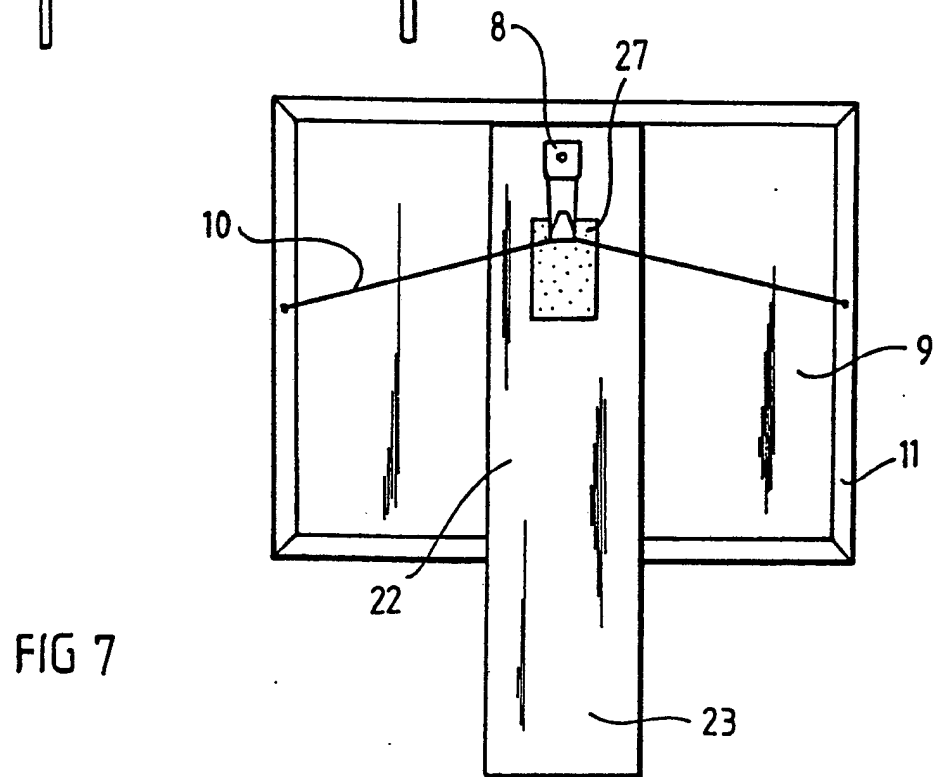
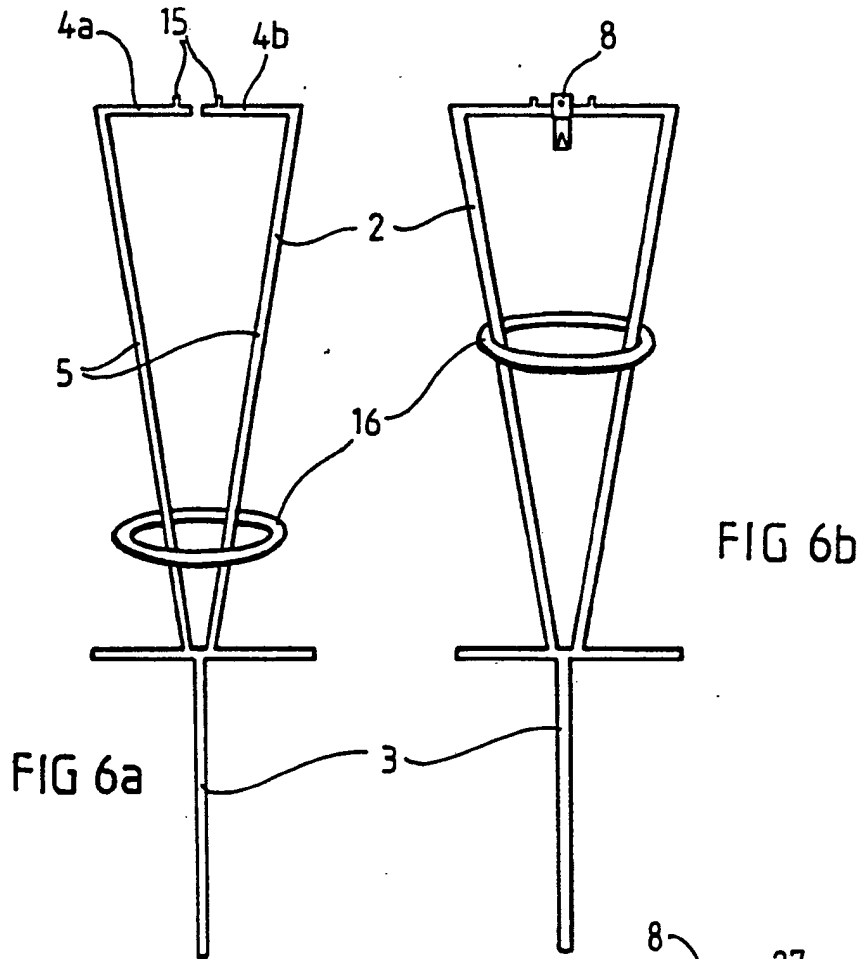
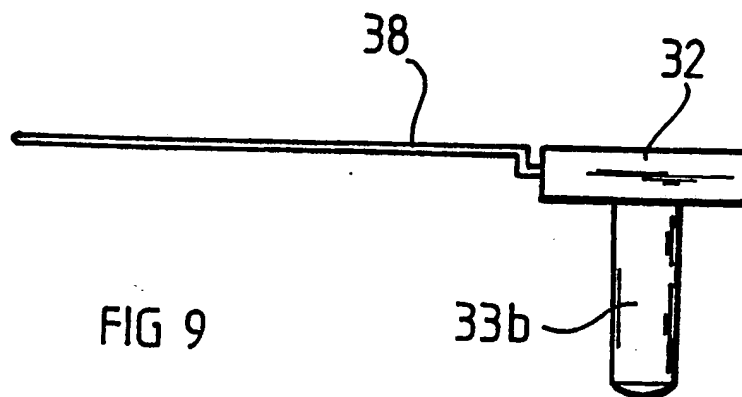
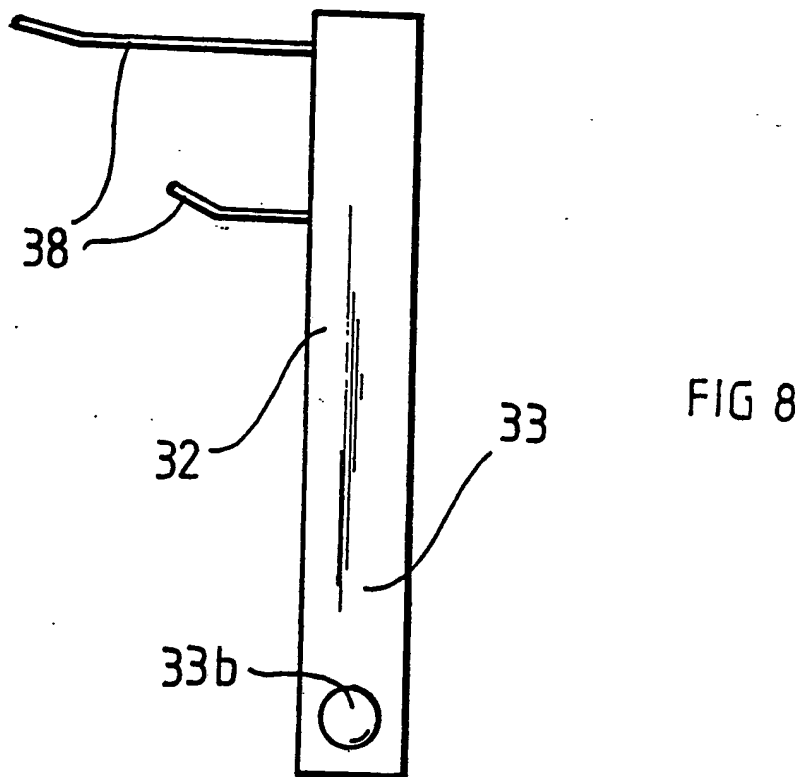
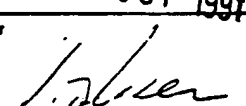


FIG 2







I. CLASSIFICATION OF SUBJECT MATTER (If several classification symbols apply, indicate all) ⁶		
According to International Patent Classification (IPC) or to both National Classification and IPC		
Int.Cl. 5	A47G1/20	
II. FIELDS SEARCHED		
Minimum Documentation Searched ⁷		
Classification System	Classification Symbols	
Int.Cl. 5	A47G ; A47J	
Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched ⁸		
III. DOCUMENTS CONSIDERED TO BE RELEVANT⁹		
Category ¹⁰	Citation of Document, ¹¹ with indication, where appropriate, of the relevant passages ¹²	Relevant to Claim No. ¹³
X	US,A,4 455 756 (GREENE) June 26, 1984 see the whole document	1,2,8,9, 12
A	---	4,5,10
X	US,A,4 559 690 (ASMUS) December 24, 1985 see the whole document	1,2,8,9, 12
A	---	4,5
A	US,A,4 517 860 (DAMERON JR.) May 21, 1985 ---	
A	WO,A,8 000 785 (EISEN ET AL) May 1, 1980 cited in the application ---	
A	WO,A,8 802 230 (GRUFMAN) April 7, 1988 ---	
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>¹⁰ Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"I" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="width: 45%;"> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"&" document member of the same patent family</p> </div> </div>		
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27 SEPTEMBER 1991	11 OCT 1991	
International Searching Authority	Signature of Authorized Officer	
EUROPEAN PATENT OFFICE	VISTISEN L. 	

ANNEX TO THE INTERNATIONAL SEARCH REPORT ON INTERNATIONAL PATENT APPLICATION NO.

GB 9100923
SA 48415

This annex lists the patent family members relating to the patent documents cited in the above-mentioned international search report.
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27/09/91

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US-A-4455756	26-06-84	None	
US-A-4559690	24-12-85	None	
US-A-4517860	21-05-85	None	
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